

Western Ecological Research Center http://www.werc.usgs.gov

## **Yosemite Field Station**

The Sierra Nevada rise from the broad central valley of California to elevations over 14,400 feet at the crest. Vegetation ranges from valley grasslands and woodlands through chaparral-covered slopes to montane coniferous forests and alpine meadows. Isolated groves of giant sequoias are interspersed along the length of the range. In the past, the primary economic activities were logging, mining, and grazing. As human population increased, these activities shifted toward recreation and watershed protection. Major concerns in the Sierra Nevada are the threat of catastrophic fire and the loss of biological diversity caused by human activities.

Yosemite National Park embraces almost 1,200 square miles of scenic wild lands set aside in 1890 to preserve a portion of the central Sierra Nevada that stretches along California's eastern flank. The park ranges from 2,000 feet above sea level to more than 13,000 feet and features alpine wilderness, three groves of giant sequoias, and the glacially carved Yosemite Valley with impressive waterfalls, cliffs, and unusual rock formations.

The Yosemite Field Station is located within the Sierra Nevada Ecoregion, adjacent to Yosemite National Park. The station provides technical assistance to the National Park Service, Bureau of Land Management, U.S. Forest Service, and other client agencies. Using their expertise on fire behavior and ecology, plant ecology, wildlife ecology, geographic information systems, and inventory, survey, and mapping techniques, scientists at Yosemite Field Station address resource issues of concern to land managers.

Studies to determine the status of rare carnivores and mountain lions are currently underway. Critical information on the region's vegetation ecology is being gathered in a vegetation inventory, classification, and mapping project, while a study of tree demography aims at predicting the effects of global climate change. The threat of catastrophic fire is being addressed by studies on fire and fuel dynamics and the feasibility of using high resolution satellite imagery to map fuels.



## **Science Expertise**

Les Chow, M.S., Wildlife Biologist

- · Wildlife ecology
- Wildlife habitat relationships

Peggy Moore, M.S., Plant Ecologist

- Plant ecology
- Exotic species

## Jan W. van Wagtendonk, Ph.D., Research Forester

- Fire ecology
- · Forest ecology
- · Geographic information systems
- Wilderness ecology

## For more information, contact:

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